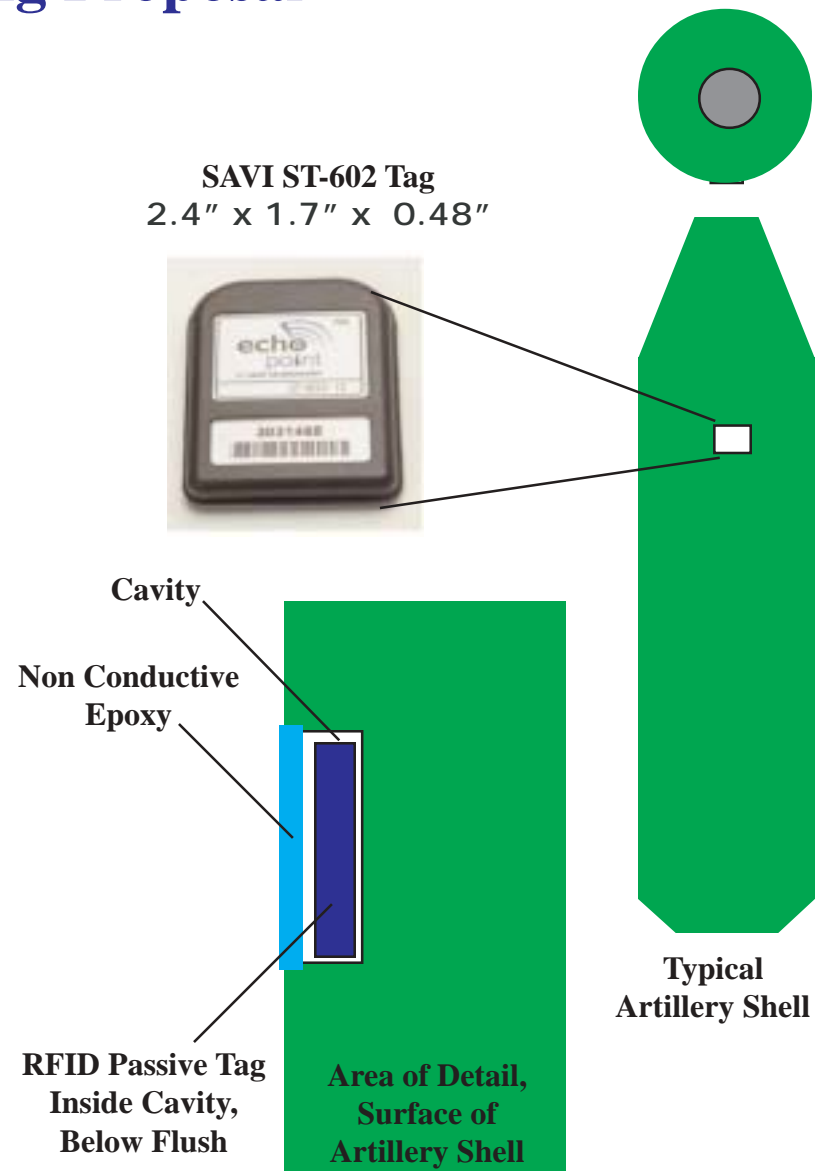# Radio Frequency Identification (RFID) & Automatic Identification and Data Collection (AIDC) IED Tagging Proposal

Tagging of IEDs Utilizing RFID & AIDC technologies:
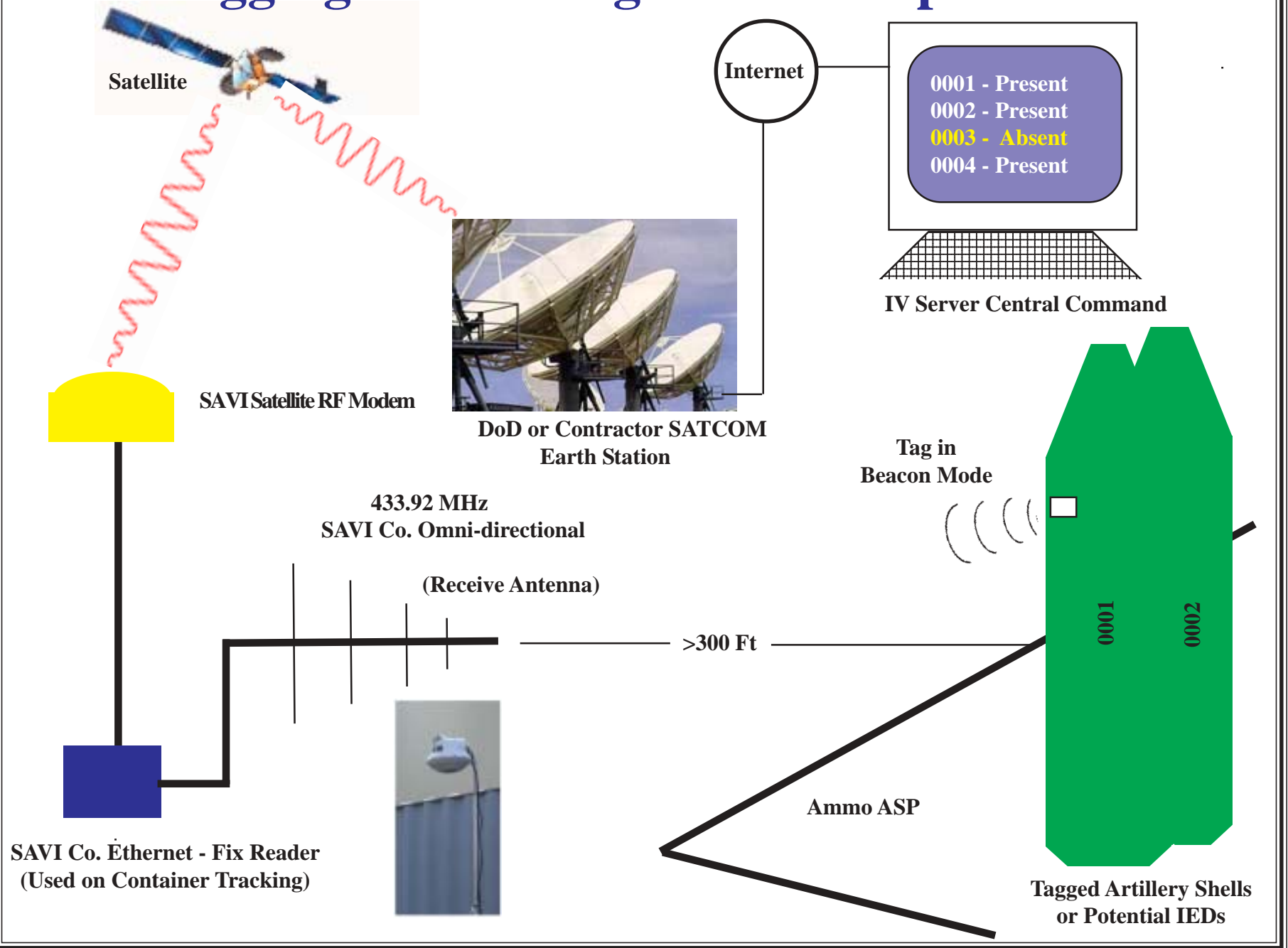
Proposal – This proposal utilizes COTS/NDI hardware to tag and provide the user with the status of stored hardware at a fixed site or ASP.
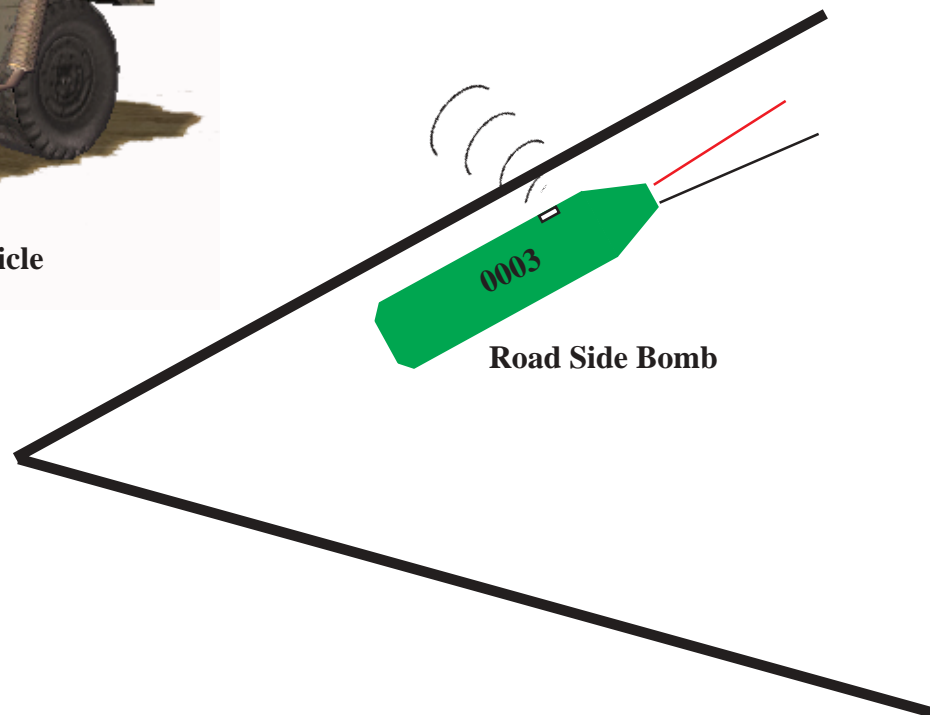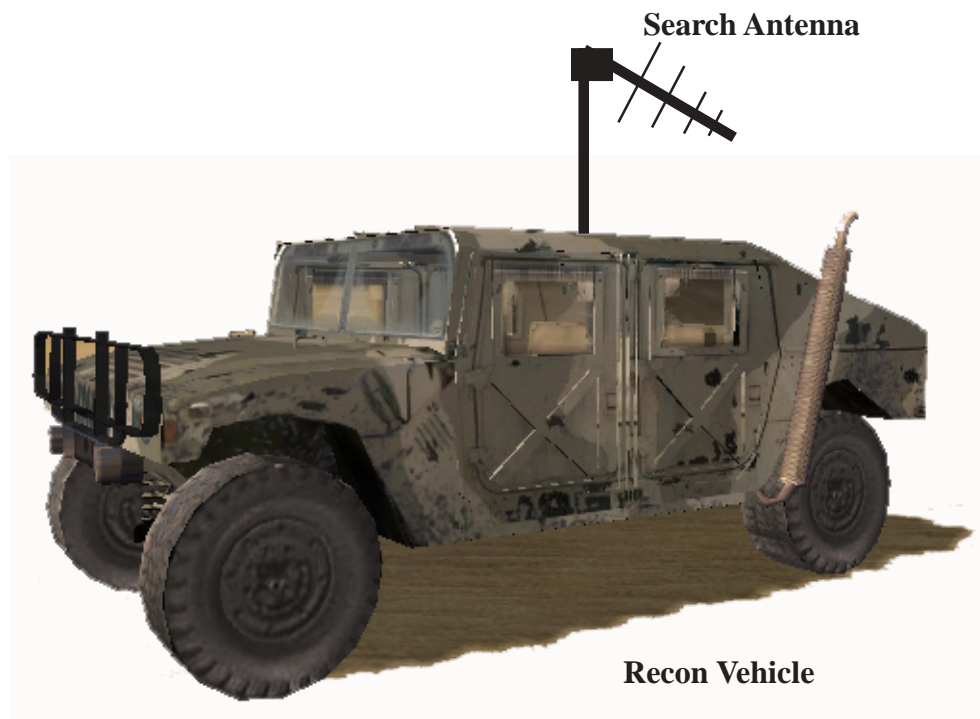
Implementation of RIFD Tag:

(a) An active Tag must be installed below the surface of the projectile. This would improve transmission and reading compatibility.

(b) The surface of the projectile must be prepared by routing out a cavity. The tag will be placed inside the cavity below flush.

(c) The cavity is then covered by a non-conductive epoxy to protect the Tag from coming off and from external environments.

(d) The projectile can then be tracked by vehicular or hand held equipment as shown in the following pages.

SAVI ST-602 Tag
2.4″ x 1.7″ x 0.48″

Cavity

Non Conductive Epoxy

RFID Passive Tag Inside Cavity, Below Flush

Area of Detail, Surface of Artillery Shell

Typical Artillery Shell

IED Tagging - RFID Tag/Reader Implementation

Satellite

Internet

0001 - Present
0002 - Present
0003 - Absent
0004 - Present

IV Server Central Command

SAVI Satellite RF Modem

DoD or Contractor SATCOM Earth Station

Tag in Beacon Mode

433.92 MHz SAVI Co. Omni-directional

(Receive Antenna)

>300 Ft

0001

0002

Ammo ASP

SAVI Co. Ethernet - Fix Reader (Used on Container Tracking)

Tagged Artillery Shells or Potential IEDs

IED Tagging - Vehicular Verification

Search Antenna

Recon Vehicle

0003

Road Side Bomb

IED Tagging - Manual Verification

Found Artillery
Shells

Hand Held
Readers

0003

Artillery Shell
Found in the
Field
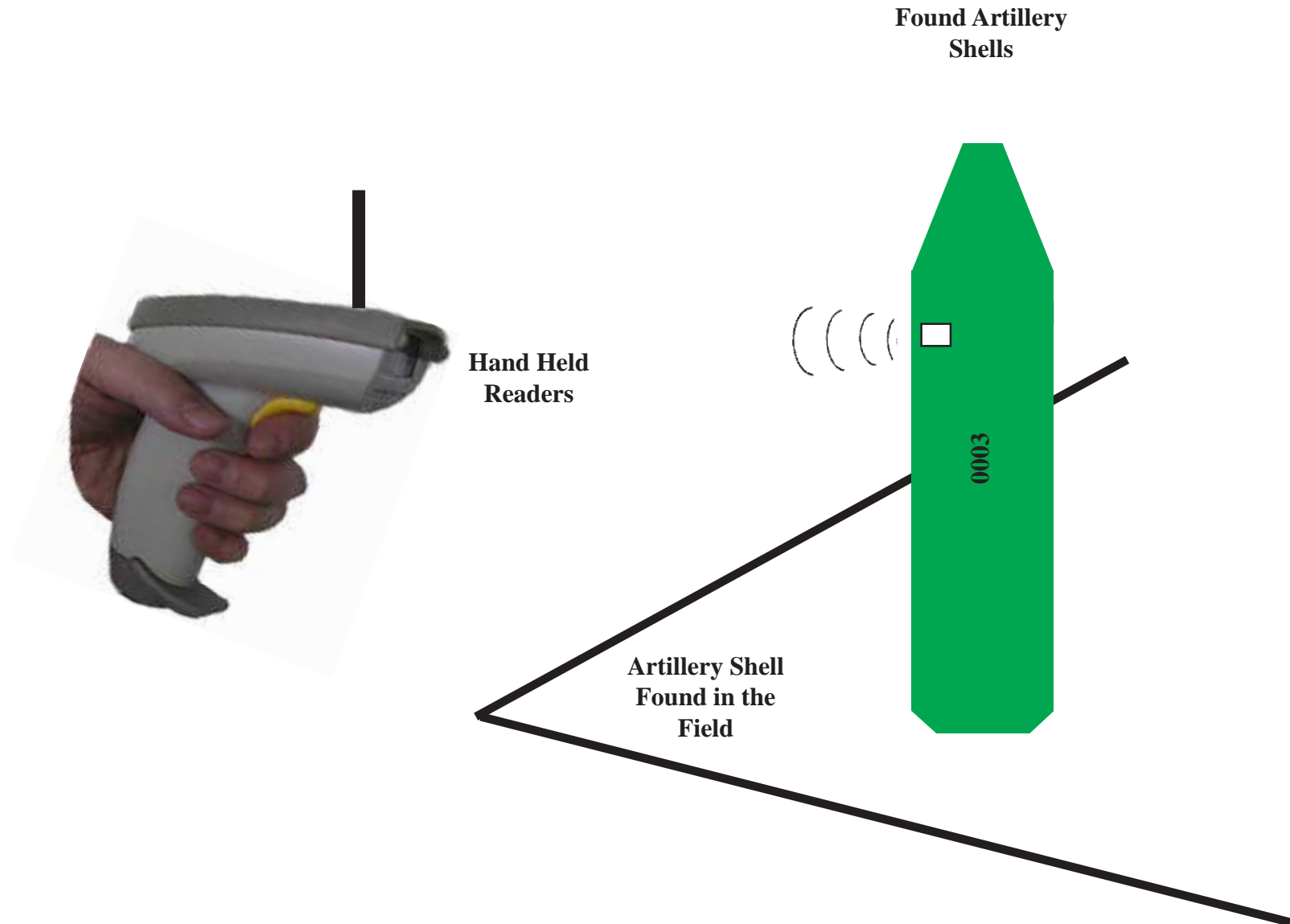
IED Tagging - ASP Implementation

TOP VIEW

0001 0002 0004 0005 0006

0048 0047 0046 0045 0044 0043

0042 0041 0040 0039 0038 0037

0007
0008
0009
0010
0011
0012

Ammo ASP

0036
0035
0034
0033
0032
0031

Antenna Nest
(Reader and
Satellite Modem)

0013 0014 0015 0016 0017 0018

0019 0020 0021 0022 0023 0024

0030 0029 0028 0027 0026 0025